

Discrimination and Causation

First, let's imagine that tomorrow scientists announced the discovery of rock-solid, unimpeachable, 100% convincing evidence of differences in mental function between men and women. Let's say, for example, they notice that there's a tiny hole where the "math center" of the brain should be. No wonder they do worse at math!

No doubt, *The Times* would respond with [a handwringing article](#) about the important scientific implications and David Brooks would [throw a party](#) and denounce closed-minded liberals. George Bush would cancel programs aimed at helping girls learn math and Harvard University would shut down their task force on getting women tenure.

But are these really appropriate responses? Showing genetic differences is only the first in a long line of things that need to be shown to prove that gender-based disparities in tenure are unavoidable. [As Jeremy Freese](#) has pointed out, it's a long line from genes to social outcomes. To make the case, you need to go a lot further.

Second, you have to show the genetic differences are relevant. It's possible the hole in the math center could be completely insignificant, that women do just as well at math irrespective. So you need to show that the hole *causes* differences in functioning. One way to do this is to find different people with differing sizes of holes, control for as many other factors as possible, and see if the size of hole is correlated with some test of math functioning.

Third, you need to prove that the differences are unavoidable. The brain has amazing levels of neuroplasticity. Perhaps with the right environment, women can be taught to do math with another part of their brain. Perhaps, as a result, they might even do *better* than men at math. Again, [Freese has pointed out](#) that the same genetic differences (or genetic similarities) can go all sorts of different places in different environments. If there's an easy environmental change that makes even genetically different women equally good at math, we ought to make it.

Fourth, you need to show a causal link from the genetic difference to the tenure disparity. Why is it that doing worse at math causes you to do worse at tenure? Are speed-math-tests used as a relevant factor in tenure decisions? If so, maybe you guys should really cut that out, because that's a pretty stupid test.

Fifth, you need to show that it's the only cause of discrimination. Even if genetic differences cause some of the disparity, it's still morally required for us to remove the rest. Do guys with holes in their math center do just as bad as women at getting tenure? Do women with no holes do just as well as men?

Right now, there's only even arguable evidence for the very first of these. Those of us who want to shove discrimination under the rug need to do a lot more work on the other four.

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